

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-10 (Canceled)

Claim 11 (Original): An isolated polypeptide comprising an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:

- (a) a polypeptide fragment of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (b) a polypeptide fragment of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z, having biological activity;
- (c) a polypeptide domain of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (d) a polypeptide epitope of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (e) a secreted form of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (f) a full length protein of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (g) a variant of SEQ ID NO:Y;
- (h) an allelic variant of SEQ ID NO:Y; or
- (i) a species homologue of the SEQ ID NO:Y.

Claim 12 (Canceled)

Claim 13 (Original): An isolated antibody that binds specifically to the isolated polypeptide of claim 11.

Claims 14-23 (Canceled)

Claim 24. (New) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of amino acid residues 1 to 121 of SEQ ID NO:68;
- (b) a protein consisting of amino acid residues 17 to 121 of SEQ ID NO:68;
- (c) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 30 contiguous amino acid residues of SEQ ID NO:68; and
- (d) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 50 contiguous amino acid residues of SEQ ID NO:68.

Claim 25. (New) The antibody or fragment thereof of claim 24 that specifically binds protein (a).

Claim 26. (New) The antibody or fragment thereof of claim 24 that specifically binds protein (b).

Claim 27. (New) The antibody or fragment thereof of claim 24 that specifically binds protein (c).

Claim 28. (New) The antibody or fragment thereof of claim 24 that specifically binds protein (d).

Claim 29. (New) The antibody or fragment thereof of claim 25 that specifically binds protein (b).

Claim 30. (New) The antibody or fragment thereof of claim 24, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 31. (New) The antibody or fragment thereof of claim 24 which is a human antibody.

Claim 32. (New) The antibody or fragment thereof of claim 24 which is a polyclonal antibody.

Claim 33. (New) The antibody or fragment thereof of claim 24 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 34. (New) The antibody or fragment thereof of claim 24 which is labeled.

Claim 35. (New) The antibody or fragment thereof of claim 34, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 36. (New) The antibody or fragment thereof of claim 24, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 37. (New) The antibody or fragment thereof of claim 24, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 38. (New) An isolated cell that produces the antibody or fragment thereof of claim 24.

Claim 39. (New) A hybridoma that produces the antibody or fragment thereof of claim 24.

Claim 40. (New) An isolated antibody or fragment thereof obtained from an animal that has been immunized with a protein selected from the group consisting of:

- (a) a protein comprising the amino acid sequence of amino acid residues 1 to 121 of SEQ ID NO:68;

- (b) a protein comprising the amino acid sequence of amino acid residues 17 to 121 of SEQ ID NO:68;
- (c) a protein comprising the amino acid sequence of at least 30 contiguous amino acid residues of SEQ ID NO:68; and
- (d) a protein comprising the amino acid sequence of at least 50 contiguous amino acid residues of SEQ ID NO:68;

wherein said antibody or fragment thereof specifically binds to said amino acid sequence.

Claim 41. (New) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (a).

Claim 42. (New) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (b).

Claim 43. (New) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (c).

Claim 44. (New) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (d).

Claim 45. (New) The antibody or fragment thereof of claim 40 which is a monoclonal antibody.

Claim 46. (New) The antibody or fragment thereof of claim 40 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a polyclonal antibody;
- (c) a humanized antibody;
- (d) a single chain antibody; and
- (e) a Fab fragment.

Claim 47. (New) An isolated monoclonal antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of amino acid residues 1 to 121 of SEQ ID NO:68;
- (b) a protein consisting of amino acid residues 17 to 121 of SEQ ID NO:68;
- (c) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 30 contiguous amino acid residues of SEQ ID NO:68; and
- (d) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 50 contiguous amino acid residues of SEQ ID NO:68.

Claim 48. (New) The antibody or fragment thereof of claim 47 that specifically binds protein (a).

Claim 49. (New) The antibody or fragment thereof of claim 47 that specifically binds protein (b).

Claim 50. (New) The antibody or fragment thereof of claim 47 that specifically binds protein (c).

Claim 51. (New) The antibody or fragment thereof of claim 47 that specifically binds protein (d).

Claim 52. (New) The antibody or fragment thereof of claim 49, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 53. (New) The antibody or fragment thereof of claim 49 which is a human antibody.

Claim 54. (New) The antibody or fragment thereof of claim 49 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;

- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 55. (New) The antibody or fragment thereof of claim 49 which is labeled.

Claim 56. (New) The antibody or fragment thereof of claim 55, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 57. (New) The antibody or fragment thereof of claim 49, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 58. (New) The antibody or fragment thereof of claim 49, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 59. (New) An isolated cell that produces the antibody or fragment thereof of claim 49.

Claim 60. (New) A hybridoma that produces the antibody or fragment thereof of claim 49.

Claim 61. (New) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of the full-length polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (b) a protein consisting of the secreted portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;

- (c) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 30 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922; and
- (d) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 50 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922.

Claim 62. (New) The antibody or fragment thereof of claim 61 that specifically binds protein (a).

Claim 63. (New) The antibody or fragment thereof of claim 61 that specifically binds protein (b).

Claim 64. (New) The antibody or fragment thereof of claim 61 that specifically binds protein (c).

Claim 65. (New) The antibody or fragment thereof of claim 61 that specifically binds protein (d).

Claim 66. (New) The antibody or fragment thereof of claim 62 that specifically binds protein (b).

Claim 67. (New) The antibody or fragment thereof of claim 63, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 68. (New) The antibody or fragment thereof of claim 63 which is a human antibody.

Claim 69. (New) The antibody or fragment thereof of claim 63 which is a polyclonal antibody.

Claim 70. (New) The antibody or fragment thereof of claim 63 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 71. (New) The antibody or fragment thereof of claim 63 which is labeled.

Claim 72. (New) The antibody or fragment thereof of claim 71, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 73. (New) The antibody or fragment thereof of claim 63, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 74. (New) The antibody or fragment thereof of claim 63, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 75. (New) An isolated cell that produces the antibody or fragment thereof of claim 63.

Claim 76. (New) A hybridoma that produces the antibody or fragment thereof of claim 63.



Claim 77. (New) An isolated antibody or fragment thereof obtained from an animal that has been immunized with a protein selected from the group consisting of:

- (a) a protein comprising the amino acid sequence of the full-length polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (b) a protein comprising the amino acid sequence of the secreted portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (c) a protein comprising the amino acid sequence of at least 30 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922; and
- (d) a protein comprising the amino acid sequence of at least 50 contiguous amino acid residues the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;

wherein said antibody or fragment thereof specifically binds to said amino acid sequence.

Claim 78. (New) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (a).

Claim 79. (New) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (b).

Claim 80. (New) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (c).

Claim 81. (New) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (d).

Claim 82. (New) The antibody or fragment thereof of claim 77 which is a monoclonal antibody.

Claim 83. (New) The antibody or fragment thereof of claim 77 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a polyclonal antibody;
- (c) a humanized antibody;
- (d) a single chain antibody; and
- (e) a Fab fragment.

Claim 84. (New) An isolated monoclonal antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of the full-length polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (b) a protein consisting of the secreted portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (c) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 30 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922; and
- (d) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 50 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922.

Claim 85. (New) The antibody or fragment thereof of claim 84 that specifically binds protein (a).

Claim 86. (New) The antibody or fragment thereof of claim 84 that specifically binds protein (b).

Claim 87. (New) The antibody or fragment thereof of claim 84 that specifically binds protein (c).

Claim 88. (New) The antibody or fragment thereof of claim 84 that specifically binds protein (d).

Claim 89. (New) The antibody or fragment thereof of claim 85 that specifically binds protein (b).

Claim 90. (New) The antibody or fragment thereof of claim 86, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 91. (New) The antibody or fragment thereof of claim 86 which is a human antibody.

Claim 92. (New) The antibody or fragment thereof of claim 86 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 93. (New) The antibody or fragment thereof of claim 86 which is labeled.

Claim 94. (New) The antibody or fragment thereof of claim 93, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 95. (New) The antibody or fragment thereof of claim 86, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 96. (New) The antibody or fragment thereof of claim 86, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 97. (New) An isolated cell that produces the antibody or fragment thereof of claim 86.

Claim 98. (New) A hybridoma that produces the antibody or fragment thereof of claim 86.